



Effective Seed Storage in Timor-Leste (ESS) Funded by USAID, Office for Foreign Disaster Assistance - OFDA

Annual Report October 2012 – September 2013



Insert: partner NGO staff checking the quality of the silos before a market event in Maliana

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Program Summary

The majority of farmers in the target districts of rural Timor-Leste rely on subsistence agriculture for their livelihoods. Unfortunately, the lack of appropriate on-farm storage for the majority of farmers in this area and poor seed quality results in a high percentage of post-harvest seed loss. These factors, combined with other challenges, such as climate change, low soil fertility, poor access to water, low levels of livelihood diversification, the dominance of traditional practices including 'slash and burn' (shifting) agriculture put seed system security at risk over time. To address these problems, Mercy Corps is implementing the USAID/OFDA funded Effective Seed Storage (ESS) in Timor-Leste Program since August 2011. The program is designed to be sustainable through an innovative market-based approach to increase access to improved storage systems linked with capacity building of farmers and extension workers, and through supporting activities to connect farmers with viable input and output markets.

The ESS program successfully introduced effective post-harvest seed storage solutions to 3,120 rural farmers in 4 sub-districts. Based on the success of the program and the continued need for seed system security throughout rural Timor-Leste, Mercy Corps, in partnership with Catholic Relief Services (CRS), carried out a nation-wide expansion of the ESS program. The expansion targets neighboring districts/sub-districts of current target areas that can be easily scaled up through the currently supported manufacturers.

This report covers the project implementation from October 2012 through September 2013. It encompasses activities done to finalize the first phase of the program and the start-up and initial activities for the nation-wide expansion.

Performance Summary

Sector: Agriculture and Food Security	Objective: Sustainable post-harvest protection of seeds and grain stocks improve crop production and livelihoods in rural Timor-Leste			
Beneficiaries Targeted	Original: 27,503 IDPs: 0	Expansion: 240,000 (no IDPs)	Budget: \$247,501 with addition of \$1,250,000 for the first year of the expansion	
Beneficiaries Reached	Original: 34,993 ¹ IDPs: 0	Expansion: 41,429 ²	Amount Spent (Total): \$ 639,187.51	
Geographic Area (s)	At least 10 out of 13 districts of Timor-Leste			
Sub-Sector: Seed System Security				
OFDA Indicator	Baseline	Target	Progress (Date)	Last Day of Report Period
Projected increase in number of months of food self-sufficiency due to seed systems activities/ agricultural inputs for beneficiary households	46.6% of HHs are food insecure with 2 months of average food shortage	30% reduction in food insecure HHs and 30% reduction in average food shortage	End-line	July 2013

¹ Calculated from number of households (HHs) buying the seed storage system plus additional farmers/HHs trained in post-harvest training times average number of HH members in the target areas ((3,378 HH + 2,266 HH) * 6.2 Individual/HH) = 34,993 individuals)

² Including the number of beneficiaries reached from the pilot

Number of people benefiting from seed systems/agricultural inputs activities, by sex	0	240,000	41,429 ³ (35.5% female)	September 2013
Additional Indicators⁴				
Percentage of beneficiaries reporting decreased post-harvest losses for seeds	93% for improved variety ⁵ growers report losses and 95% report losses of other varieties during storage	80% reduction from the baseline	End-line	July 2013
Increase in availability of quality seed during planting season	39% of improved variety seeds are lost during storage and 45% of other varieties	80% reduction from the baseline	End-line	July 2013
Number of farmers with access to BCC materials/training	0	40,000	6,682 ⁶	September 2013
Percentage of farmers adopting improved technique(s)	0	80%	End-line	July 2013
Number of farmers with access to improved seed storage system, by sex	0	40,000	4,546 ⁷ (34% female)	September 2013

Sector Summary (Activities)

This report summarizes ESS program activities from October 2012 to September 2013 and encompasses final 5 months of the first phase as well as the start-up and initial activities for the nation-wide expansion of the program.

A. First phase program finalization

52 farmers who accessed the subsidized unit were consulted to provide feedback on storage design and 2 local manufacturers were trained in business management

In October 2012 the project team conducted a rapid assessment with 52 farmers who accessed the subsidized storage units. The survey was done to check whether the unit is being used for grain/seed storage and to provide feedback for the manufacturers to improve their products and services. More than half of the survey respondents have used the storage unit and most are using it to store maize seeds (12% are using it for rice seeds, 4% for various beans, and the rest for maize seeds). Meanwhile, 48% of respondents have not been able to use it mainly because they did not have seeds in hand (most farmers had already planted their seeds because it was a planting season). In regards to the design, 8% of respondents would like a different color (white

³ The total number of beneficiaries reached from the pilot (34,993 individual) plus total number individual benefited from the expansion to date (calculated from total household accessed the storage system times average number of household members = 1,038 x 6,2 = 6,436)

⁴ Indicators have been adjusted based on the expansion proposal

⁵ This refers to Sele, the introduced maize variety by the government program's Seeds of Life.

⁶ Calculated from number of households (HHs) buying the seed storage system plus additional farmers/HHs trained in post-harvest training during the pilot phase plus number of HHs buying the seed storage system during the expansion phase (3,378 + 2,266 + 1,038)

⁷ The total number of 3,378 households accessed the introduced storage system from the pilot plus additional of 1,038 households from the expansion

and light green – as it is believed insects don't like it) than is currently available (dark red and dark blue); 12% would like a larger PVC lid opening(s); and 8% of respondents feel that the price is still too high, despite receiving subsidy vouchers. Based on this feedback, design improvement was then undertaken to ensure that the next generation of storage units will have larger openings while different colors will be made available. Different types of sealant are being tested to further reduce the unit cost.

It is understood that this process should ideally be led by the manufacturers themselves as part of the company's R&D activities. However due to the local manufacturer's low managerial capacity, Mercy Corps decided to support this process while simultaneously working to increase the business' capacity. It is clear that strengthening the capacity and improving the outreach of these local businesses will be key to sustainability and market expansion of the storage solutions over time. As such, the project staff also provided capacity building (training and mentoring) on business management to both local manufacturers involved in the project. This activity focused mainly on: (i) simple profitability analysis, (ii) basic bookkeeping, and (iii) development of marketing plans.

Two informational workshops with stakeholders and four market events were facilitated in two districts to further introduce and promote the developed seed storage system

During this reporting period, two workshops were held, one in Ainaro and the other in Same, Manufahi district. A full day workshop was designed to promote the improved storage unit to broader stakeholders as well as to capture learning from the early adopters who have accessed it. In Same, the workshop was held on December 5th with 78 participants (42% women) from different organizations (District Administration Office, Ministry of Agriculture, international and local NGOs, local media, micro finance institution, farmer groups) in attendance. In Ainaro, a similar workshop was carried out on December 14th with 68 participants (37 women). One of the major issues raised during both workshops is the need to expand the program into other areas not currently targeted by the project. In addition, from a technical perspective, participants expressed the need for instructions on how to maintain the storage units (i.e. ensuring that farmer will clean the unit before re-using it, what to do if the unit is leaking, etc.) and requested these be included on the existing instructions sticker which currently only addresses use.

In addition, During the month of January 2013, the ESS team facilitated the promotion of developed seed storage systems in both Manufahi and Ainaro. In Manufahi district, the events were held in two main district markets in Same and Simpang-Tiga. Meanwhile in Ainaro, those events were done



in Hatu-Udo and Ainaro markets. A local musician performed to attract people in the market. The pictures present the market events.

A total number of 3,378 farmers have accessed the introduced system by February 2013

An additional 777 vouchers were distributed during January 2013. These additional vouchers resulted from savings from the respective budget line item due to the decreased value of the subsidy voucher. As it was previously reported, the project has been able to facilitate manufacturers to find cheaper materials that cut the price of the unit by half and thus gave an opportunity for the project to reduce the voucher's value (from \$30 as initially planned down to \$20). With a total number of 1,560 vouchers previously distributed and redeemed, thus, in total 2,337 voucher-recipient farmers (33.7% women) have accessed the storage unit.

In addition, based from sales records of the manufacturers, a total number of 110 farmers purchased the storage system without vouchers (paid the full price of the unit) during this reporting period, resulting in the total number of 1,041 farmers who purchased without vouchers. By the end of the first phase a total number of 3,378 farmers have accessed the introduced system⁸.

Nation-wide expansion: preparation and improving program design

Subsequent to the award from OFDA for the expansion, an intensive discussion with CRS has been started to prepare a partnership agreement. For the expansion, CRS assists Mercy Corps to reach the expansion target in their working areas that will cover at least three districts of Lautem, Baucau and Viqueque. CRS partners with three local NGOs, they are: Caritas Baucau, Colega da Paz, and Together in Development. Each partner is responsible for community mobilization in one district with Caritas Baucau in Baucau, Kolegas de Paz in Viqueque, and Together Improving Development in Lautem. Additionally, Mercy Corps also partners with two local NGOs, they are: Organisaun Haburas Moris in Western districts (Bobonaro, Liquica and Ermera) and Ida Mos Maunfahe in the Southern districts (expanded to nearby districts of the current program areas). All local partners were selected based on their established presence in their respective regions/districts and proven track record of effective and efficient community mobilization and technical experience in agriculture.

During the reporting period, Mercy Corps and CRS improved the program design incorporating inputs from the final evaluator as presented below (under Monitoring and Evaluation section). The improvements include a revision of criteria of beneficiaries and establishment of a mechanism to ensure transparency, including complaint mechanism. The team also improved the BCC materials, including revision of the simple messaging sticker and training module, and creation of video showcasing post-harvest good practices that can be transferred and played on mobile phones. In addition, discussions with manufacturers were done to include other alternative design or solutions (i.e. open cap silo with GrainPro bags or used water bottles), re-calculation of the production cost and re-pricing the storage system and how to work with local shops and make the storage unit permanently available in the shops. However, the program decided not include promotion of village savings and lending association (VSLA) and access to

⁸ This result contribute to the achievement of the indicator of *Number of farmers with access to improved seed storage system* and *Number of people benefiting from seed systems/agricultural inputs activities*

MFIs as these activities are beyond the scope of the project as well as the OFDA but will continue the provision of subsidy through voucher system to the selected beneficiaries.

B. Nation-wide expansion

NGO partners' project start-up

During this reporting period, CRS and Mercy Corps signed a sub-award agreement to formalize partnership. A one day project start-up meeting was conducted to discuss the project agreement and develop a common understanding of the project. A formal review and final revision of project goals, objectives, indicators, and roles and responsibilities was discussed and agreed. Mercy Corps recruited a new National Program Manager to supervise the program implementation and local NGO partners in Mercy Corps target areas. CRS recruited and hired three new staff for this project: Project Manager, Technical Advisor, and Monitoring and Evaluation Officer. Both CRS and Mercy Corps were fully staffed by April 2013.

In April, CRS conducted sub-recipient financial management assessments. Meanwhile Mercy Corps carried out the assessments on May to its two local NGO partners, Ida Mos Maunfahe (IMM) in Same and Organizasaun Haburas Moris (OHM) in Maliana. These assessments analyzed the organizations' capacity in ten areas: financial personnel, financial system, documentation and record keeping, internal control, financial reporting, inventory management, fixed assets, receivable, other assets and payables, and procurement.

The assessment identified areas of improvement, which have been transformed into Corrective Action Plans. Local partners sub award agreements were finalized for all local NGO partners. A one-day workshop was then conducted with the directors and finance staff to discuss the Corrective Action Plans and develop a timeframe for completion. In May, CRS held a three-day project start-up workshop with all partner staff. A complete review of the sub-recipient agreements and each organization proposed project plan was conducted. Mercy Corps conducted the similar workshop with its NGO partners' staff in June.

Behavior Change Communication (BCC) materials were reviewed and finalized and local NGO partners' staff and extension workers were trained

In May 2013, Mercy Corps and CRS technical staff worked together to review BCC materials that were used previously during the pilot phase by incorporating CRS training materials and feedback from the pilot evaluation report. The new BCC materials include a sticker to be posted on the storage unit and indicate good practices in post-harvest handling, training/promotion module, and trainer's facilitation guide. These BCC materials guide participants through each community meeting from initial project introduction, training on seed storage and post-harvest handling, and voucher distribution. Participants will explore potential obstacles and brainstorm solutions to be prepared for these situations when they arise in the communities. The training/promotion activity utilizes adult experiential learning methods in which each participant will be expected to demonstrate understanding of the materials by presenting to the group.

Both Mercy Corps and CRS conducted trainings in each respective target area with partner field staff and MAF suco extension officers. This training covered topics of community engagement,

expected obstacles with BCC, and technical information on Seed Storage System. The training employed a series of adult learning methods to ensure all participants learned the information and felt comfortable training others on the content. All participants were required to present using the training poster materials in order to successfully complete the training. All participants passed post-test and presented successfully.

Training of Trainers Participants	Total
Local partner staff	25
MAF – suco extension officers	37

Silo designs were reviewed and finalized

During this reporting period, Mercy Corps conducted rapid prototyping of the silo designs incorporating feedback from previous program beneficiaries, the final evaluation report of the pilot phase, and CRS team members and partners as well as two manufacturers from the pilot phase in Ainaro and Manufahi districts. Two silo designs were then finalized. It was determined to maintain the design of a small sized silo (35 liter capacity) but redesign the large silo (75 liter capacity) with a very large opening to be combined with Grain Pro bags.

New additional silo manufacturers were identified and engaged

ESS team conducted an assessment in project area to identify potential material suppliers and blacksmiths. The assessment identified additional 17 previously FAO trained blacksmiths (in addition to two supported manufacturers in phase-1) interested in the project across the country. The assessment also documented the lack of input supplies in the districts.

In June 2013, a business opportunity workshop was held in Dili to present the nation-wide plan to them, to get feedbacks as well as to see their interest to participate in the program. Out of 19 blacksmiths, 17 participated in the workshop and expressed their willingness to participate actively in the program. Each has signed the interest letter to Mercy Corps and CRS. The contracts with the two manufacturers from the pilot phase were renewed to expand their business to their neighboring districts. The 5 blacksmiths in CRS' target areas and additional 10 in Mercy Corps areas have signed agreements with CRS and Mercy Corps respectively to participate in the project through agreed upon roles, responsibly, monitoring, and a detailed process for voucher system.

After the workshop, two input suppliers were given the opportunity to promote their products and services to support these blacksmiths to be silo manufacturers. One challenge with this is that neither of these two suppliers currently transports materials to the eastern districts. CRS and Mercy Corps will continue to work with these businesses to develop a sustainable model for transportation of materials.

A local trader is linked with GrainPro Inc. for making the GrainPro bags available in the country

Mercy Corps has successfully linked Loja Agricultura, an agriculture input supplier in Dili with the GrainPro Inc. in the Philippines for making the GP bags available in the country. The first purchase of 400 bags was done by the Loja Agricultura and has been marketed through blacksmiths and through their sales networks. Despite that success, there seems that adoption of the bags is a little bit slower than what it was expected. Strategy to bundle GP bags with large opening silo has not been that effective to attract customers to buy. This most likely caused by the fact that the GP bags are relatively new for farmers in Timor-Leste. Mercy Corps will continue to work with Loja Agricultura to target district retailers and to further promote the

products through different mediums (i.e. radio, government extension workers, road show) to enhance the adoption of the products.

Additional 1,038 farmers have accessed to silos as a result of the community mobilization, BCC training and voucher distribution

August and September was the first month of silo distribution and voucher redemption. Mercy Corps and CRS project staff worked with blacksmiths to ensure successful process with accurate and complete information as per agreement with an inventory list accompanied the original vouchers.



Community based programming began in August/September 2013 with each local implementing organization conducting training and voucher distributions totaling 25 promotional events. At these initial trainings, CRS has provided transport of manufactured silos in their target areas to the communities in order to ignite interest in the silos thus increasing demand. CRS is phasing out the transportation of silo to communities in the following quarter, as blacksmithing increase their capital and communities become more aware of the technology. CRS and local partners are working closely with blacksmiths to determine a transportation solution and of which costs will be reflected in a slight increase to participant contribution. The results of this promotion and training have been done to 1,038 farmers (34% women) on Behavior Change and Communication (BCC) and they have received vouchers, and purchased silos (across 11 districts)⁹.

Monitoring and Evaluation

The Final Evaluation of the first phase of the program was conducted

From January 26 - February 7, 2013, Johan van Duijn, an independent consultant, carried out the final evaluation of the first phase of the ESS program. Field data collection included a household survey to a total of 66 randomly selected households (HH) and an additional 30 HHs in purposefully selected aldeias¹⁰ that had early exposure to the program. In addition, the consultant also conducted Focus Group Discussions (FGDs) and interviews with seed silo manufacturers, and project and government staff. The following is summary of the final evaluation results:

Objectives	Summary
Set 1: Assess the program achievements against indicators	
1.1: Projected increase in # of months of food self-sufficiency due to seed systems/agricultural input for beneficiary households (Target: 3 months)	<ul style="list-style-type: none"> • 1.95 months achieved • Target is too ambitious to be reached with the very short period of the project timeframe. It should also be noted that with only a few HHs having used the storage unit during when the evaluation is carried out, it is unrealistic to

⁹ This result contribute to the achievement of the indicator of *Number of farmers with access to BCC materials/training and Number of people benefiting from seed systems/agricultural inputs activities*

¹⁰ Hamlet/Sub-village with a leader, but no council

	attribute this achievement only to this program, and is more likely to be achieved as a combination of the ESS and other interventions ¹¹ .
1.2: # of people benefiting from seed systems/agricultural input activities, by sex (Target: 1560)	<ul style="list-style-type: none"> • 2337 HHs received a voucher and purchased silo (33.7% women) • 1041 bought storage units without vouchers
Additional Indicators¹²	
1.3: Projected % decrease in seed storage losses amongst pilot farmers (Target: 50%)	<ul style="list-style-type: none"> • 80.5% reduction in HH survey • 100% reduction reported in FGDs
1.4: Projected # additional months maize is available in the household as a result of improved storage (Target: 3 months)	<ul style="list-style-type: none"> • Not directly assessed due to translation error in survey template • 43% (Ainaro) and 29% of HHs (Manufahi) report longer availability • Figure assumed to be 1.95 months as in objective 1.1.
Set 2: Evaluate effectiveness of developed storage system and BCC materials and activities¹³	
2.1: Evaluate effectiveness of the designed storage system and gather feedback from users on the design of the developed storage unit	<ul style="list-style-type: none"> • Very effective with average of 80.5% reduction in storage losses • Production issue regarding the PVC cap/opening being too small
2.2: Evaluate adoptions of BCC material and activities by farmers	<ul style="list-style-type: none"> • 2266 individuals received training in post-harvest techniques (31% women) • 29 government extension workers were trained (2 women) • Reported adoption of training teachings ranging from 70-100% • High percentage of people have more than one information source on how to use the storage unit
2.3: Assess impact of the program on gender dynamics (in particular at the household level)	<ul style="list-style-type: none"> • Women report that they have an increased responsibility for seed production. Men disagree among each other. • Women feel that there is more joint responsibility over seed storage since project started. In 63% of the HHs women report there is joint responsibility now, while this used to be 44%.
Set 3: Evaluate effectiveness of market development of developed storage unit¹⁴	
3.1: Assess economic viability of supported local manufacturers	<ul style="list-style-type: none"> • Manufacturers have perception that they are making money • Overall they are making a profit but losing money on the bigger storage unit due to high input costs and unrealistic pricing
3.2: Evaluate effectiveness of voucher system	<ul style="list-style-type: none"> • Reached 150% of the target number • Existing doubts about selection system through aldeia leader potentially creating conflicts • Time span between selection of beneficiaries and buying of silo is at one week too short. Some people have difficulty collecting the money.
3.3: Assess capacity of storage manufacturers to embed extension services on post-harvest handling	<ul style="list-style-type: none"> • Manufacturers do not have the confidence yet to provide training • With current product pricing will need to define what costs will be embedded

¹¹ Mercy Corps was also implementing a complementing food security program (called SECURE) during the period and target location of the ESS.

¹² See note 4. Indicators have been adjusted for the expansion

¹³ Additional set of assessment questions to provide insights for improvements of the expansion activities

¹⁴ As previous

The final evaluator was also able to provide recommendations for a nation-wide extension of program:

- Timeline for engagement with communities should be made longer to allow preparation of beneficiaries.
- Promotion of Village Saving and Lending Association (VSLA) and access to Micro Finance Institutions (MFIs).
- Revise criteria of beneficiary selection and involve communities more as opposed to relying on local leaders.
- Standardize integration with improved cultivation practices and use of improved seeds.
- Re-pricing of current storage products based on production cost and with reasonable profit margins.
- Define area of operation of factories and ideally should be located near to markets.
- Make storage units permanently available in existing shops.
- Centralize order of materials to ensure availability and good prices.
- Explore alternative, smaller, storage solutions for vulnerable households.

M&E System is developed for NGO and business partners

The Monitoring and Evaluation System for the project was developed using CRS' Simple Measurement of Indicators for Learning and Evidence-based Reporting (SMILER) methodology. The SMILER four-day workshop brought together key programmatic and M&E staff from both Mercy Corps and CRS to create a comprehensive M&E system. This included communication maps to ensure beneficiary accountability and stakeholder engagement. Data flow maps were developed to ensure project information is systematically collected, analyzed and shared throughout project cycles. All supporting data collection tools and reporting templates were created with instruction sheets to ensure both Mercy Corps and CRS personnel utilize tools accurately. They are including:

- Local NGO partner monthly report, including the following annexes
 - o Quality control checklist
 - o Household tracking sheet
 - o Sales Merchant Log
- Input Supplier Log
- Silo Manufacturer Report
- Consumer Feedback form
- Training & workshop report

Baseline conducted for the nation-wide expansion

CRS and Mercy Corps recruited and hired the same consultant who conducted the final evaluation of the first phase of the program to conduct the baseline assessment for the nation-wide expansion of the program. The baseline tool was developed by the consultant and reviewed, translated, and field tested by Mercy Corps and CRS staff before finalizing.

The baseline survey was conducted from June 26- July 8, 2013. Field data collection was conducted in four districts representing the four different Agro-Ecological Zones (AEZs) in Timor-Leste. In each of the districts households were randomly selected in 4 aldeias (hamlets), with a total of 389 valid survey forms, more than the 380 required as per statistical requirements. One of the indicators has been partially assessed due to the wrong question posed. Additionally, despite receiving training some of the enumerators still found some questions challenging.

The average HH size is 6.2, while the average age of the HH heads was 48.4. A majority of the HHs (45%) grows 0.5-1 ha of maize, with only 17% more than 1 ha. The baseline collected specifically data for the three indicators. The indicators are in the table below, together with the values identified.

Indicators	Summary
Projected increase in number of months of food self-sufficiency due to seed systems activities/ agricultural input for beneficiary households	<ul style="list-style-type: none"> The survey questions looked at food security, not at self-sufficiency Only data of Covalima available for self-sufficiency. Only 1.7% is self-sufficient, with on average a food shortage of 3 months per year 46.6% of the HHs are food insecure, reporting an average shortage of 0.9 months for all HHs and 2.0 for the ones reporting being food insecure. Bobonaro comes out as the most food-insecure district There are big differences between the aldeias in a district A 30% reduction would mean for Covalima a target of 2.1 months of not being self-sufficient in food production Data from other districts can be gathered during trainings
Increase in availability of quality seed during planting season	<ul style="list-style-type: none"> 24% of HHs grow Sele variety 39% of Sele seeds are lost during storage and 45% of other varieties Storing over the fire place is one of the most popular storage methods 25% of Sele seeds is coming from own production, while majority of 69% given by the government and further 13.5% by NGOs 75% of other varieties come from own production
Percentage of beneficiaries reporting decreased post-harvest losses for seeds	<ul style="list-style-type: none"> 93% of Sele growers report losses 95% report losses of other varieties during storage Target of 80% reduction is realistic

The survey also collected other relevant information which can be used at the further development of the project, or will be valuable at other stages of project monitoring and evaluation. Some key findings are:

- Male respondents are reporting higher percentage of households making joint decisions with their female household members than female respondents.
- Metal storage options are most effective in keeping good seeds, although only a few are reporting that no losses at all. On average metal drums and silo score well.
- When the metal drums are storing seeds for more than one household the seed losses almost double, most likely to be caused by the regular opening of the drum.

Coordination

During this period, the Program Manager and staff attended various coordination meetings both with other INGOs and the Ministry of Agriculture and Fisheries (MAF). The following summarizes the coordination meetings attended:

- November 6th. FAO held a roundtable discussion on Conservation Agriculture (CA) with MAF and development partners in which the Project Coordinator participated. The introduction of CA is expected to increase farmers' production and thus enhance the need for access to effective storage systems which manufacturers should be able to tap

- in. Follow up meetings including the establishment of the CA working group was held by FAO and MAF in 2013 where Mercy Corps is one of the group members.
- November 23rd. The Project Coordinator presented the ESS project to the Permascout participants (permanent agriculture scout – a program to promote sustainable agriculture through scout camping events – where more than 1,500 youth farmers from different districts participated).
 - December 10th. INGO food security working group meeting. The Program Manager presented an ESS project update to the other working group members.
 - During May and June 2013, Mercy Corps and partners introduced the project to the Ministry of Agriculture and Fisheries at both the national and district levels (district outside the first phase target areas). The project was also introduced to the district government officials and local leaders who have been included in discussions on village and beneficiary selection criteria. Local leaders have agreed to be involved in mobilizing communities by organizing initial project introduction meetings where the community will review beneficiary criteria and self-select project beneficiaries.

Conclusion

The project achievements as presented above have been made possible by the substantial contributions of our local NGO partners. In addition, the willingness of local manufacturers and input suppliers to participate/collaborate in the project is invaluable and is the key for the success of the project. In general, program activities are running according to the work plan, and progress has been made in all key activities. During this reporting period, the project team has focused efforts to continue to strengthen the capacity of the existing local manufacturers and to expand project outreach to other districts through larger number of manufacturers (from 2 to 17 manufacturers). Learning from the previous phase, we have found that once the 'business model' is developed and installed into new manufacturers, it can be rolled out quickly. Despite that most of the blacksmiths just started the production on September, they have been able to produce and sell 1,000 silos. It is expected that the production capacity will increase over time and learned from previous phase.

The project team has learned the importance of understanding local practices and cultures and the need to take these factors into account when introducing new products and/or technology. Because of this, the project has developed simple illustrated training materials (or behavioural change communication materials to be precise) based on local practices and has opted not to inject too many new practices.

The main challenge faced by the program during this reporting period is a relatively high staff turn-over. During this reporting period, the Project Coordinator resigned from his position. In addition, ESS Program Manager and Mercy Corps M&E Manager also resigned to take other positions with other organizations. Timor-Leste is a small country with many international NGOs and UN agencies working in the country with a limited number of qualified human resources in market development sector that results in high competition among international organizations. This has for some extent contributes to the high staff turn-over. Mercy Corps made sure that an additional time allocation of the Food Security and Agriculture Program Manager (an expat position) as well as an internally recruited Field Coordinator was done to fill the gap.

From the fields

In My Own Words

Written by Lamberto Nunes

My name is Lamberto Nunes. I am 65 years old and have 9 family members living with me. I live in Aldeia Tcharano in Lospalos. Each year, I plant about 1 hectare of maize and from this crop is my family food for the year. Until this project came to my aldeia I did not know about seed storage and never seen improved seeds storage containers. Each year my family lost seed and grain due to weevils, rodent and fungi infestations but I didn't know the solution. Now that I learned this important information about storage but also seed selection, I am happy that I will not have these loses anymore and that my seed will be stronger. Thank you to the project for bringing this information to us – in our aldeia it is not often that information is brought. Thank you again.



Mario's Story

Written by Emily Baron

The ESS Program is working with small manufacturers like Mario to develop a market system for high-quality and affordable metal storage silos. These small businesses have transformed farmers' ability to store their vital harvest of seeds and grain, keeping them in optimal condition until households need to use them. Initially piloted in two districts, the ESS Program is now working with silo manufacturers in ten districts of Timor-Leste.



Before the program began helping Mario's new business making containers to store grain and seeds in 2012, the future for his wife and three children was uncertain. With high unemployment in rural Timor-Leste, Mario looked destined to be a subsistence farmer for the rest of his life, like others in his community.

But with the support of the program, Mario's business is now booming—he has sold 1,360 of the silos which protect farmers' seeds from rodents, rot and insect infestation. While some of these are subsidized and sold to the most vulnerable farmers for a cheaper price, Mario has also built a steady retail trade and is selling full-priced products in local markets and in villages. He is employing five local men, and high sales have ignited the group's work ethos and they frequently toil long hours six days a week dedicatedly hammering together the blue stainless steel containers. Mario is putting his share of the profits towards his children's schooling and

foundations are already being laid for a bigger and better family home behind his wooden shack.

The business training provided by Mercy Corps taught Mario how to introduce simple book-keeping practices to better manage his business, and how to promote the benefits of the silos to farmers, helping him to maximise sales when he takes to the road to sell his product to the rural target communities identified by Mercy Corps as most in need of the product.

Mario says this experience of starting a business has changed the way he looks at old problems in his community, and now he is starting to see possible solutions where once things seemed impossible. In the last few months he has started work on new metal products to expand his business, including rainwater harvesting containers and cold-storage boxes for fish. “When I was a farmer it felt like things for me and my family would never change. Now with the profits I’ve made from my new business supported by Mercy Corps, it seems anything is possible.” Mario said.

Uainiki Blacksmith of Baucau

Written by Marcelino Pinto

Manuel Gaspar is the team leader of the Local Blacksmith Cooperative in Baucau district. His family has been the blacksmith business since 1942, with his father and grandfather originally making simple tools such as coping knife, crowbar, spade, knife, and sickle. Mr. Gaspar learned much from his father that began his progression into becoming a leader in his field. When FAO began looking to identify blacksmiths in Baucau to teach how to make silos, Mr. Gaspar stood out as the best. He was already well known and respected in his community and so the obvious choice for FAO training program. This led to a relationship with FAO from 2001-2012 where Manuel produced silos for FAO to distribute. FAO provided all materials and Manuel produced many many silos, but when the project ended – so did the supply of materials, stalling his production.



Today he is employing 10 permanent workers and 15 temporary workers. He has organized them into 2 teams, each focusing on producing one type of silo. Each team can produce 10 silos a day, and they consistently pass the project silo quality checklist. They workers have all been trained personally by Manuel and he holds them to a high standard of craftsmanship. Manuel says, “our reputation is very important so each Silo must be same quality... that is why I check each silo before the quality check by Caritas Baucau.”

But production isn’t the only area that Manuel is seeing a business opportunity. He remembers how difficult it was for him and other blacksmiths when FAO project ended and they could no longer get supplies so he wants to work with other blacksmiths to find a permanent solution. In September he reached out to the other blacksmiths with a proposition that will increase his business by facilitating the procurement of silo materials. He is offering to transport materials for all blacksmiths to Baucau for only small increase in cost to cover transportation from Dili to Baucau. They are still in negotiations but positive progress is being made. But this is not where

Manual entrepreneurial spirit ends. He has also proposed to the blacksmith that he could provide delivery service for already produced Silo to communities at an additional cost of \$.50 per silo. This would help the blacksmiths be able to reach more communities and honor more vouchers.

Attachment

Baseline report for the nation-wide expansion